

REMARKS

New claim 52 has been added. Therefore, on entering this amendment, claims 1-16 and 40-52 are all the claims pending in the application.

I. Preliminary Matters

Applicant thanks the Examiner for initialing the references filed with the Information Disclosure Statement filed on February 13, 2002. Applicant also thanks the Examiner for accepting the drawings filed on February 13, 2002. Applicant further thanks the Examiner for acknowledging the claim to foreign priority and for confirming that the certified copy of the priority document was received for Application No. 09/828,998.

II. Claim Rejections under 35 U.S.C. § 103

Claims 1-7, 12-16, and 49-51 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Numata et al. (U.S. Patent No. 5,625,384) in view of Suzuki et al. (U.S. Patent No. 5,650,802).

Applicant respectfully submits that the present invention, as recited in claim 1 includes two different and separate limitations; namely “sedimentation property” and “sedimentation state.”

Sedimentation property is, for example, the ease of sedimentation (see Specification page 21, lines 19-27, page 37, lines 5-15, page 38, lines 1-10 and page 40, lines 30-32). Such a sedimentation property is a natural property of every liquid.

On the other hand, the sedimentation state is variable depending on various factors,

including a time elapsed after the cartridge has been manufactured or set in the apparatus. The LONGMAN Dictionary of Contemporary English, Version 3, clearly distinguishes the terms “state” and “property” as follows:

<state>: the mental, emotional, or physical condition that someone or something is in at a particular time

<property>: a quality or power that belongs naturally to something.

The Examiner admits that Numata does not disclose (or suggest) the limitations related to the sedimentation state or the sedimentation property. Specifically, the Examiner admits that Numata does not disclose that the controller controls the liquid discharging unit based on information about sedimentation property of liquid and information about sedimentation-state of the liquid in the liquid chamber.

However, the Examiner incorrectly alleges that Suzuki et al. overcomes the above-noted deficiency in the teachings of Numata.

Column 1, lines 35-47 of Suzuki et al. describes that when the liquid droplet ejecting apparatus is not used for long periods of time, cohered solids (cohesion of pigment and other solid materials) of the dispersed phase can clog nozzles in the recording head or settle out of the dispersion medium, causing low concentration of pigments in the ejected droplets.

However, the above teaching is believed to be nothing more than the teaching related to “concentration” as in Numata. This is believed to be different from “sedimentation state,” as required by the present invention.

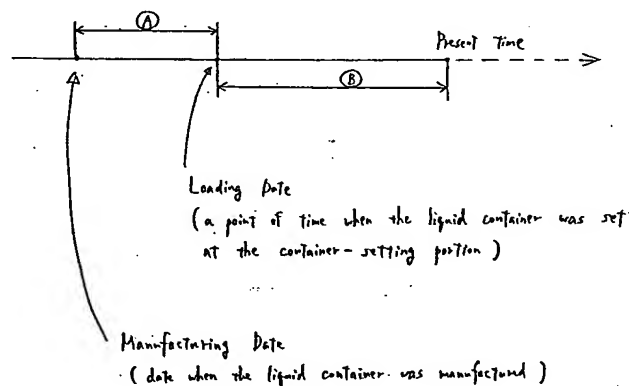
In addition, Suzuki et al. teaches nothing about the sedimentation property of the liquid. Suzuki does not suggest that the controller controls the liquid discharging unit based on information about the sedimentation property nor anything else related to the ease of sedimentation.

The Examiner is kindly requested not to ignore the limitation related to the “sedimentation property” as it is believed to be a significant aspect of the present invention.

A skilled artisan would not have found it obvious to practice the present invention, as recited in claim 1, from the combined teachings of Numata/Suzuki, at least because the combined teachings of Numata/Suzuki does not suggest that the controller controls the liquid discharging unit based on information about the sedimentation property.

Claims 2-7, 12-16 depend on claim 1 and are allowable at least for the same reasons.

Regarding claims 49-51, the Examiner appears to be mischaracterizing the present invention. The Applicant respectfully submits that the following figure illustrates the difference between the present invention, as recited in claims 49-51 and the combined teachings of Numata/Suzuki.



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① is referred to in Numata et al. (USP 5,625,224).
② is used in claims 49 and 50.
However, ② is not derived from ① obviously.

Referring to the above figure, Numata only suggests using the duration “A” which is the time period between a manufacturing data and a loading date. On the other hand, the present invention uses duration “B,” which is the interval of time between the loading time and the present time. The loading time in the present invention refers to the time at which the liquid container was set at the container-setting portion.

The Applicant respectfully submits that time duration “B” is believed to be completely different from and cannot be derived from the time duration “A.” A skilled artisan would not have found it obvious to practice the present invention, as recited in claims 49-51, from the combined teachings of Numata/Suzuki.

III. Allowable claims

Claims 8-11 have been found allowable but for their dependence on rejected base claims. The Examiner is requested to hold the objection in abeyance pending resolution of the status of the base claims.

IV. New Claim

The Applicants respectfully add claim 52 for examination.

V. Conclusion

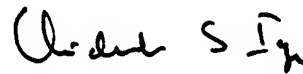
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.116
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